ABB BALDOR RELIANCE

Customer information packet

XT3204T

20HP, 1770RPM, 3PH, 60HZ, 256T, 0960M, TEFC, F1
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	256T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CCSA US
	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	3
Current @ Voltage	52.000 A @ 208.0 V
	48.000 A @ 230.0 V
	24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LY-001-224
Eff. date	06-28-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	12-04-2020

Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3A
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.36 IN
Power Factor	83
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4163L										
CAT.NO.	XT3204T						**I.P.**	54		
SPEC.	09-0000-2753						**ENCL**	TEFC		
FRAME	256T			**H.P.**	20					
VOLTS	230/460			**P.F.**	83					
F.L. AMPS	48/24				**RATING**	40C AMB-CONT				
R.P.M.	1770									
HZ.	60	**PH.**	3		**CLASS**	F				
SER.F.	1.15	**DES.**	A		**SL HZ**	1				
NEMA NOM. EFF.	93			**WK2**	2.62					
DE	6309			**ODE**	6208					
MAG. CUR.	20.8/10.4									
INV TYPE	PWM	**CHP**	60		**TO**	90		**T. CODE**	T3A	
CT	3	**TO**	60	**VT**	3	**TO**	60			
CC	010A	**SN**								
	USABLE AT 50 HZ 15HP 190/380V 44/22A									

AC Induction Motor Performance Data
Record # 67965
Typical performance - not guaranteed values

Winding: 09WGT459-R003	**Type:** 0960M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	59.27 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			48/24	**Breakdown Torque**	232 LB-FT
R.P.M.			1770	**Pull-up Torque**	126 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	141 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	198 A
Service Factor (S.F.)			1	**No-load Current**	10.4 A
NEMA Nom. Eff.	93	**Power Factor**	83	**Line-line Res. @ 25ºC**	0.33814 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	58°C
				Locked-rotor Power Factor	26.5

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	45	67	78	83	86	87
Efficiency	89.2	93	93.7	93	93.1	92.4
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3
Line amperes	11.8	15	19.2	24	29.3	34.9

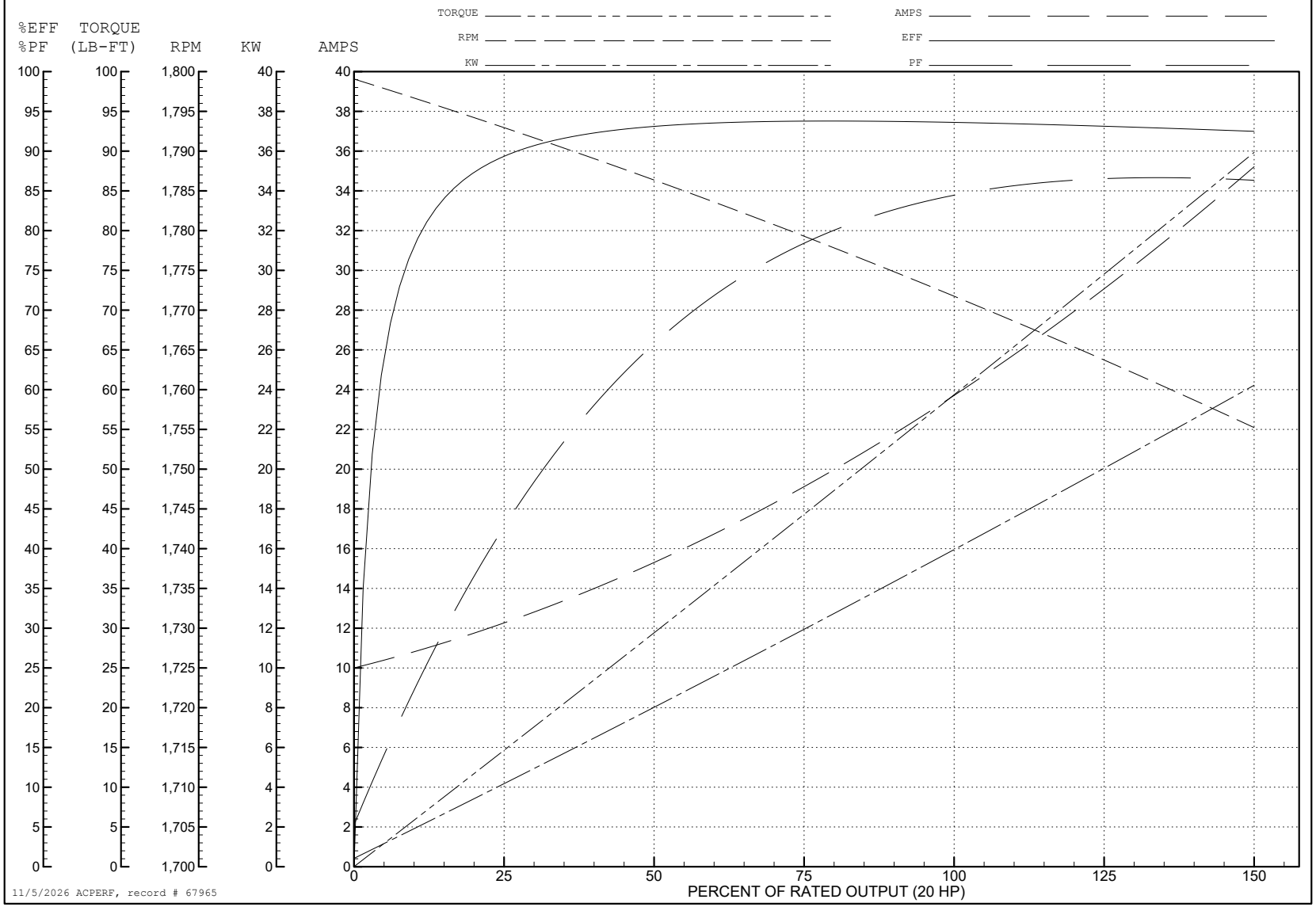
ABB Motors and Mechanical Inc.

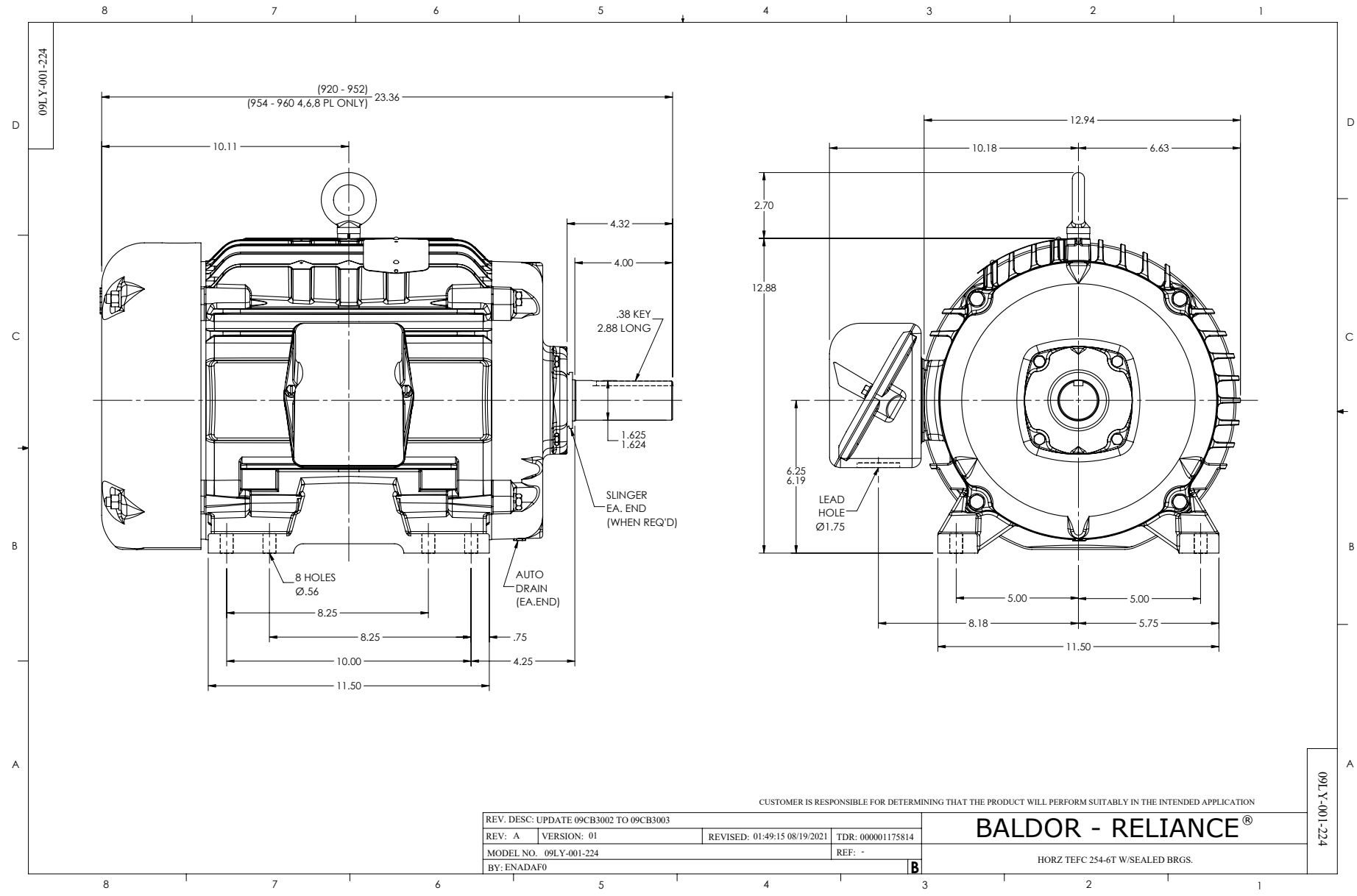
WINDING # 09WGT459

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

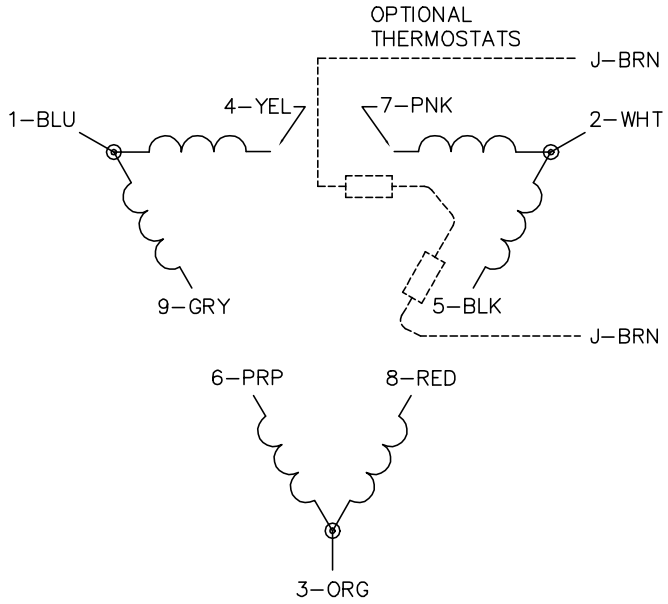
Typical performance - not guaranteed values.

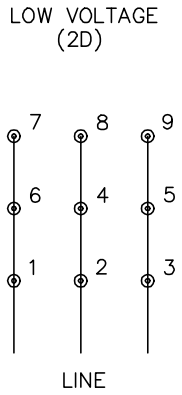
TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198

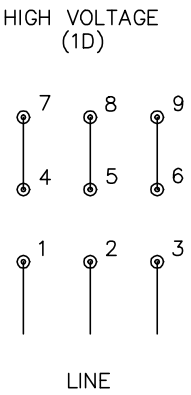



09LY-001-224
(920 - 952)
(954 - 960 4,6,8 PL ONLY)
23.36
10.11
4.32
4.00
.38 KEY
2.88 LONG
1.625
1.624
SLINGER
EA. END
(WHEN REQ'D)
8 HOLES
Ø.56
AUTO
DRAIN
(EA.END)
8.25
8.25
.75
10.00
4.25
11.50
12.94
10.18
6.63
2.70
12.88
6.25
6.19
LEAD
HOLE
Ø1.75
5.00
5.00
8.18
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 09CB3002 TO 09CB3003
REV: A
VERSION: 01
REVISED: 01:49:15 08/19/2021
TDR: 000001175814
MODEL NO. 09LY-001-224
REF: -
BY: ENADAF0
B
BALDOR - RELIANCE®
HORZ TEFC 254-6T W/SEALED BRGS.
09LY-001-224

CD0180







NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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